Takeshi Meguro et al.
92478-3500
Sheet 1 of 4
Joseph W. Price 949-253-4920

FIG.1

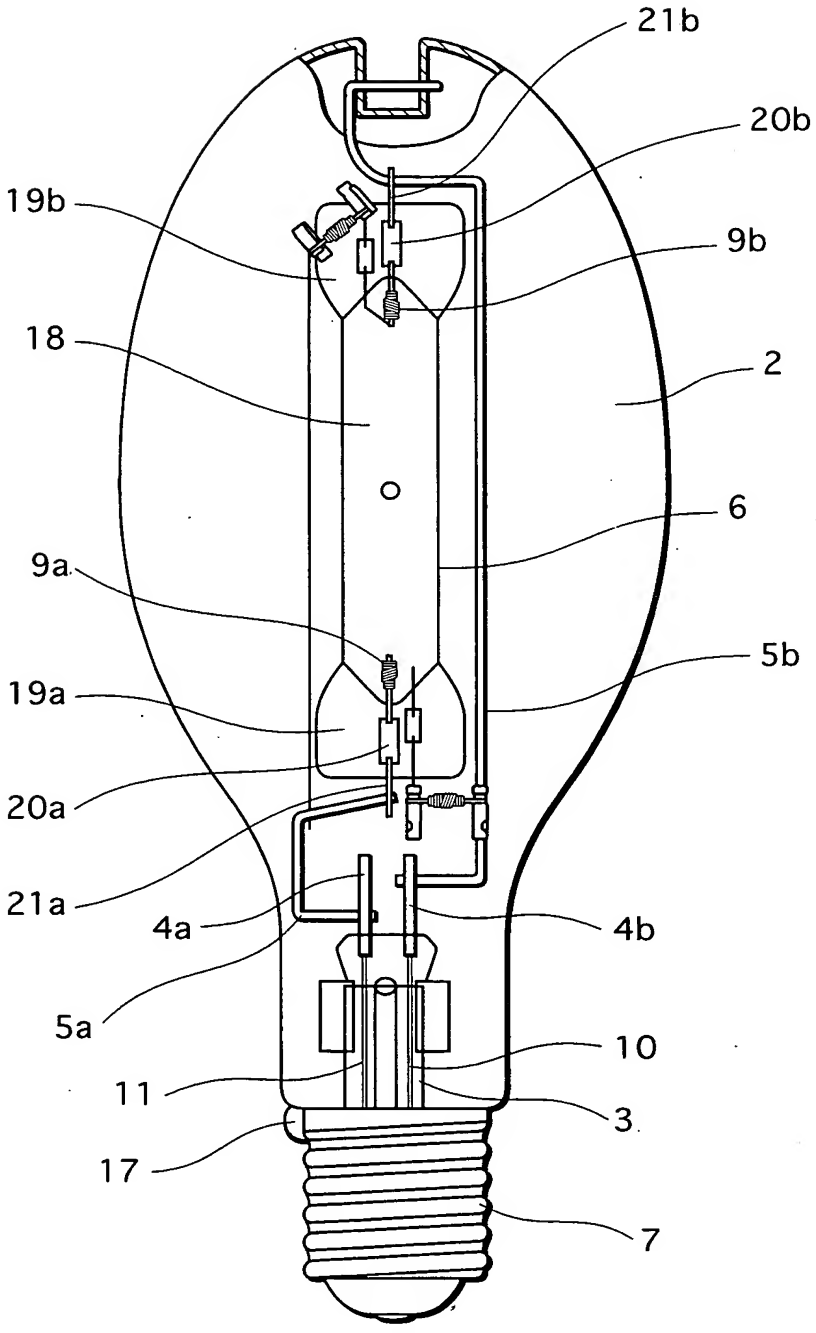
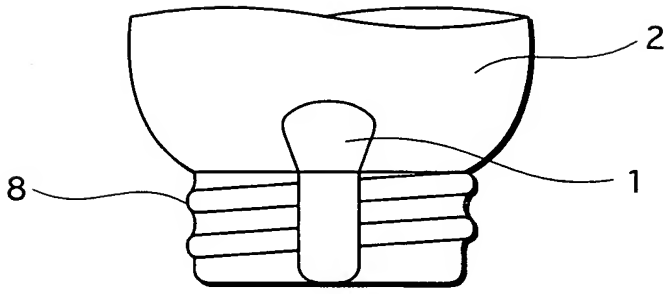


FIG.2



Takeshi Meguro et al.
92478-3500
Sheet 3 of 4
Joseph W. Price 949-253-4920

FIG.3

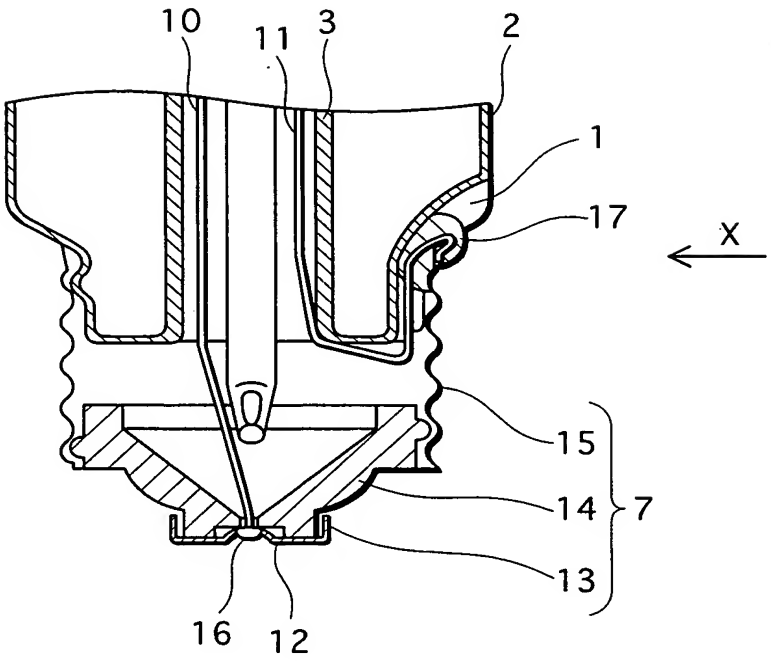


FIG.4

		COMPOSTION (MASS %)						MELTING POINT (DEGREES CENTIGRADE)		TEMPERATURE CYCLE TEST
		Sn	Sb	Cu	Ag	Bi	OTHER	SOLIDUS	LIQUIDUS	DECISION ABOUT CRACKS AFTER 250 CYCLES
EXAMPLES OF THE INVENTION	1	Bal.	5					240	243	SATISFACTORY
	2	Bal.	10					245	266	SATISFACTORY
	3	Bal.	15					246	301	SATISFACTORY
	4	Bal.	20					245	324	SATISFACTORY
	5	Bal.	30					244	365	SATISFACTORY
	6	Bal.	40					243	398	SATISFACTORY
	7	Bal.	10	10				238	329	SATISFACTORY
	8	Bal.	15	1				239	305	SATISFACTORY
	9	Bal.	15	9				239	380	SATISFACTORY
	10	Bal.	20	3				239	313	SATISFACTORY
	11	Bal.	20	5				239	353	SATISFACTORY
	12	Bal.	25	5				239	352	SATISFACTORY
	13	Bal.	30	3				238	353	SATISFACTORY
	14	Bal.	30	5				240	354	SATISFACTORY
	15	Bal.	30	10				239	428	SATISFACTORY
	16	Bal.	40	1				240	388	SATISFACTORY
	17	Bal.	40	7				314	380	SATISFACTORY
	18	Bal.	10		1			240	264	SATISFACTORY
	19	Bal.	25	3	0.3			235	330	SATISFACTORY
	20	Bal.	25	5	0.3	0.5		235	349	SATISFACTORY
	21	Bal.	30	4			Ni 0.05 Ge 0.01	239	350	SATISFACTORY
	22	Bal.	30	4			Mn 0.05	238	350	SATISFACTORY
	23	Bal.	30	5			Mo 0.05	239	346	SATISFACTORY
	24	Bal.	25	3			Cr 0.01 Fe 0.03	239	333	SATISFACTORY
	25	Bal.	25	6			Co 0.02 P 0.01	236	365	SATISFACTORY
	26	Bal.	25	5			Ga 0.05	238	351	SATISFACTORY
EXAMPLES FOR COMPARISON	1	100						232	232	FAILED
	2	Bal.		0.7				227	227	FAILED
	3	Bal.		1				226	245	FAILED
	4	Bal.		2.5				226	324	FAILED
	5	Bal.			3.5			221	221	FAILED